Amendments to the Specification

Please amend the paragraph starting on page 2, line 10, by replacing it with the following amended paragraph:

> To this end, measurement circuit multiplies the digitized *voltage* measurement signal by the digitized *current* measurement signal. In particular, the digitized measurement signals consist of sampled voltage measurement values and sampled current measurement values. By multiplying the individual voltage samples by the individual current samples and summing the resulting products over time, energy consumption values are obtained. In particular, in a single phase system, the energy consumption measurement may be given by the following equation:
>
> $WH = \underline{\Sigma}\, V(n) * I(n)\underline{;}$ for $n = 1$ to N,
>
> Where WH is equal to energy consumption (e.g. watt-hours), $V(n)$ is the nth voltage sample, and $I(n)$ is the nth current sample that is sampled contemporaneously with $V(n)$.

The above amendment does not introduce new matter. In particular, the amendment adds a summation symbol "Σ" that merely clarifies the relationship described in the immediately preceding text of the paragraph (". . .multiplying the individual voltage samples by the individual current samples and summing the resulting products over time").

Please amend the paragraph starting on page 2, line 10, by replacing it with the following amended paragraph:

The processing circuit 28 receives the digital energy consumption signals and converts the digital energy consumption signals into energy consumption data. By way of example, the processing circuit 28 generates performs a real energy calculation by multiplying contemporaneous voltage and current samples of each phase together and then summing the resulting products over time. For example, in the exemplary four wire wye system shown in Fig. 1, the processing circuit 28 may perform the following calculations:

$\cancel{WH_A = VS_A(n) + IS_A(n)}$ $\underline{WH_A = \Sigma\ VS_A(n) * IS_A(n)}$ for $n = 1$ to N

$\cancel{WH_B = VS_B(n) + IS_B(n)}$ $\underline{WH_B = \Sigma\ VS_B(n) * IS_B(n)}$ for n = 1 to N

$\cancel{WH_C = VS_C(n) + IS_C(n)}$ $\underline{WH_C = \Sigma\ VS_C(n) * IS_C(n)}$ for n = 1 to N

$Total\ Energy = WH_A + WH_B + WH_C$

Where $VS_X(n)$ is the nth voltage sample from phase x and $IS_x(n)$ is the nth voltage sample from phase x. The nth voltage sample and the nth current sample are sampled substantially contemporaneously.

The above amendments do not constitute new matter. In particular, the new amendments merely add a summation symbol "Σ" and replace an addition symbol "+" with a multiplication symbol. It is respectfully submitted that these amendments merely correct the equations to more accurately reflect the description of these equations in the immediate preceding text ("... performs a real energy calculation by multiplying contemporaneous voltage and current samples of each phase together and then summing the resulting products over time...").

Please amend the paragraph starting on page 19, line 12, by replacing it with the following amended paragraph:

With reference to the preferred embodiment described herein, the processing circuit 28 generates the energy consumption data using the *adjusted* digital energy consumption signals. For example, the processing circuit 28 would perform the real energy calculation discussed above using the following equations:

$$WH_A = \cancel{Adj\_VS_A(n) +}\ \underline{\Sigma\ Adj\_VS_A(n)\ *}\ Adj\_IS_A(n) \text{ for } n = 1 \text{ to } N$$

$$WH_B = \cancel{Adj\_VS_B(n) +}\ \underline{\Sigma\ Adj\_VS_B(n)\ *}\ Adj\_IS_B(n) \text{ for } n = 1 \text{ to } N$$

$$WH_C = \cancel{Adj\_VS_C(n) +}\ \underline{\Sigma\ Adj\_VS_C(n\ )*}\ Adj\_IS_C(n) \text{ for } n = 1 \text{ to } N$$

$$Total\ Energy = WH_A + WH_B + WH_C$$

The above amendments do not constitute new matter. In particular, the new amendments merely add a summation symbol "Σ" and replace an addition symbol "+" with a multiplication symbol. It is respectfully submitted that these amendments merely correct errors in the equations that would be readily recognized by one of ordinary skill in the art. For example, it is apparent that these equations represent modified versions of the equations found on page 17 of the application.

More specifically, the above equations of page 19 are intended to represent the equations of page 17, with the exception that the voltage and current values of page 17, $VS_A(n)$, $IS_A(n)$, $VS_B(n)$, $IS_B(n)$ $VS_C(n)$ and $IS_C(n)$, are replaced with *adjusted versions* of those values $Adj\_VS_A(n)$, $Adj\_IS_A(n)$, $Adj\_VS_B(n)$, $Adj\_IS_B(n)$, $Adj\_VS_C(n)$, $Adj\_IS_C(n)$ on page 19. In addition, the Application expressly supports this assertion. (See Application at p.19, lines 1-11). Thus, one of ordinary skill in the art would have readily recognized

that, with the exception of the use of *adjusted values*, the equations on page 19 should be identical to the equations on page 17. The above amendments thus correct errors to the equations of page 19 that would have been readily apparent to one of ordinary skill in the art.